CLAIMS

What is claimed is:

1. A system for interactively viewing enterprise metadata, comprising:

a memory for storing a data structure in the form of a graph, with nodes representing asset metadata for enterprise data assets and edges representing relationships between asset metadata;

a path finder for generating at least one path within the graph satisfying prescribed constraints; and

a report generator for generating a report about the graph, based on paths generated by said path finder.

2. The system of claim 1 further comprising a web portal user interface, through which said report generator is activated.

3. The system of claim 1 further comprising a viewer tool user interface, through which said report generator is activated.

4. The system of claim 1 wherein the report is an impact analysis report, describing the impact on the asset metadata, of at least one prescribed modification to a portion of the asset metadata.

5. The system of claim 1 wherein the report is an impact analysis report, describing the impact on the enterprise data assets, of at least one prescribed modification to a portion of the asset metadata.

6. The system of claim 1 wherein the report is a transformation planning report, describing steps to transform data from one asset to another.

7. The system of claim 1 wherein the report is a data quality report, describing steps to verify compliance of asset data with at least one prescribed business rule.

8. The system of claim 1 wherein the report is a data discovery report, displaying asset metadata within the enterprise data assets that correspond with a prescribed asset metadata.

9. The system of claim 8 wherein the report is a data discovery report, displaying asset metadata within the enterprise data assets that are equivalent to a prescribed asset metadata, in the sense that the corresponding data is represented the same way.

10. The system of claim 8 wherein the report is a data discovery report, displaying asset metadata within the enterprise data assets that are equivalent to a prescribed asset metadata, in the sense that the corresponding data is represented in an equivalent way.

11. The system of claim 8 wherein the report is a data discovery report, displaying asset metadata within the enterprise data assets that are logically dependent on a prescribed asset metadata.

12. The system of claim 8 wherein the report is a data discovery report, displaying asset metadata within the enterprise data assets upon which a prescribed asset metadata is logically dependent.

13. The system of claim 8 wherein the report is a data discovery report, displaying asset metadata within the enterprise data assets that correspond with a prescribed asset metadata, and have a more specific context.

14. The system of claim 8 wherein the report is a data discovery report, displaying asset metadata within the enterprise data assets that correspond with a prescribed asset metadata, and have a more general context.

15. The system of claim 8 wherein the report is a data discovery report, displaying asset metadata within the enterprise data assets that comprise data corresponding with a prescribed asset metadata.

16. The system of claim 8 wherein the report is a data discovery report, displaying asset metadata within the enterprise data assets that correspond to data comprised within a prescribed asset metadata.

17. The system of claim 1 wherein the report is a statistical summary report describing statistics about the asset metadata.

18. The system of claim 17 wherein the statistical summary report describes a distribution of enterprise data assets based on at least one descriptor.

19. The system of claim 18 wherein the statistical summary report describes a distribution of enterprise data assets based on owner.

20. The system of claim 18 wherein the statistical summary report describes a distribution of a enterprise data assets based on a quality level.

21. The system of claim 1 further comprising a data redundancy analyzer for identifying redundancies among the enterprise data assets.

22. The system of claim 21 wherein the report is a plan for eliminating redundancies among the enterprise data assets.

23. The system of claim 1 wherein the report is a comparison report, comparing metadata for at least one enterprise data asset with metadata for a specific enterprise data asset designated as a base for comparison.

24. The system of claim 23 wherein the comparison report indicates metadata for the at least one enterprise data asset that corresponds with metadata for the specific enterprise data asset, and has a more general context.

25. The system of claim 23 wherein the comparison report indicates metadata for the at least one enterprise data asset that corresponds with metadata for the specific enterprise data asset, and has a more specific context.

26. The system of claim 1 further comprising a code generator, for generating program code instructions corresponding to a report.

27. The system of claim 26 wherein the program code instructions are expressed as SQL script.

28. The system of claim 26 wherein the program code instructions are expressed as XSLT script.

29. The system of claim 26 wherein the program code instructions are expressed as Java code.

30. The system of claim 26 wherein the program code instructions are expressed as a transformation planning report, describing steps to transform data from one asset to another.

31. The system of claim 1 further comprising a request-for-change generator, for generating a request to apply at least one modification to the graph.

32. The system of claim 31 wherein said request-for-change generator enforces at least one approval process for the request.

33. The system of claim 1 wherein the graph includes nodes for an ontology model, into which asset metadata is mapped.

34. The system of claim 33 wherein the ontology model is a generic industry model.

35. The system of claim 33 wherein the ontology model is an enterprise specific model.

36. The system of claim 33 wherein edges connect pairs of nodes that correspond to metadata that is mapped to one another.

37. The system of claim 33 wherein the report is a statistical summary report describing a percentage of enterprise data assets for which asset metadata is mapped to the ontology model.

38. The system of claim 33 wherein the report is a statistical summary report describing a percentage of enterprise data assets for which asset metadata is completely mapped to the ontology model.

39. The system of claim 33 wherein the report is a statistical summary report describing a percentage of enterprise data assets for which asset metadata is partially mapped to the ontology model.

40. The system of claim 33 wherein the report is a comparison report, comparing metadata for at least one enterprise data asset with metadata for the ontology model.

41. The system of claim 40 wherein the comparison report indicates metadata for the at least one enterprise data asset that corresponds with metadata for the ontology model, and has a more general context.

42. The system of claim 40 wherein the comparison report indicates metadata for the at least one enterprise data asset that corresponds with metadata for the ontology model, and has a more specific context.

43. The system of claim 1 further comprising an access controller for restricting a user's access to asset metadata based on a user privilege.

44. The system of claim 1 further comprising an access controller for restricting a user's access to asset metadata based on a requested action.

45. The system of claim 1 further comprising an access controller for restricting a user's access to asset metadata based on a subject area of asset metadata.

46. The system of claim 1 further comprising a filter for displaying different parts of the asset metadata to different types of users.

47. The system of claim 1 further comprising a filter for displaying different parts of the asset metadata to technical and non-technical users.

48. The system of claim 1 further comprising a filter for displaying asset metadata in different formats to different types of users.

49. A method for interactively viewing enterprise metadata, comprising:

providing a data structure in the form of a graph, with nodes representing asset metadata for enterprise data assets and edges representing relationships between asset metadata;

generating at least one path within the graph satisfying prescribed constraints; and

generating a report about the graph, based on paths generated by said path finder.

50. The method of claim 49 wherein the report is an impact analysis report, describing the impact on the asset metadata, of at least one prescribed modification to a portion of the asset metadata.

51. The method of claim 49 wherein the report is an impact analysis report, describing the impact on the enterprise data assets, of at least one prescribed modification to a portion of the asset metadata.

52. The method of claim 49 wherein the report is a transformation planning report, describing steps to transform data from one asset to another.

53. The method of claim 49 wherein the report is a data quality report, describing steps to verify compliance of asset data with at least one prescribed business rule.

54. The method of claim 49 wherein the report is a data discovery report, displaying asset metadata within the enterprise data assets that correspond with a prescribed asset metadata.

54. The method of claim 53 wherein the report is a data discovery report, displaying asset metadata within the enterprise data assets that are equivalent to a prescribed asset metadata, in the sense that the corresponding data is represented the same way.

56. The method of claim 54 wherein the report is a data discovery report, displaying asset metadata within the enterprise data assets that are equivalent to a prescribed asset metadata, in the sense that the corresponding data is represented in an equivalent way.

57. The method of claim 54 wherein the report is a data discovery report, displaying asset metadata within the enterprise data assets that are logically dependent on a prescribed asset metadata.

58. The method of claim 54 wherein the report is a data discovery report, displaying asset metadata within the enterprise data assets upon which a prescribed asset metadata is logically dependent.

59. The method of claim 54 wherein the report is a data discovery report, displaying asset metadata within the enterprise data assets that correspond with a prescribed asset metadata, and have a more specific context.

60. The method of claim 54 wherein the report is a data discovery report, displaying asset metadata within the enterprise data assets that correspond with a prescribed asset metadata, and have a more general context.

61. The method of claim 54 wherein the report is a data discovery report, displaying asset metadata within the enterprise data assets that comprise data corresponding with a prescribed asset metadata.

62. The method of claim 54 wherein the report is a data discovery report, displaying asset metadata within the enterprise data assets that correspond to data comprised within a prescribed asset metadata.

63. The method of claim 49 wherein the report is a statistical summary report describing statistics about the asset metadata.

64. The method of claim 63 wherein the statistical summary report includes a distribution of enterprise data assets based on at least one descriptor.

65. The method of claim 64 wherein the statistical summary report includes a distribution of enterprise data assets based on owner.

66. The method of claim 64 wherein the statistical summary report includes a distribution of a enterprise data assets based on a quality level.

67. The method of claim 49 further comprising identifying redundancies among the enterprise data assets.

68. The method of claim 67 wherein the report is a plan for eliminating redundancies among the enterprise data assets.

69. The method of claim 49 wherein the report is a comparison report, comparing metadata for at least one enterprise data asset with metadata for a specific enterprise data asset designated as a base for comparison.

70. The method of claim 69 wherein the comparison report indicates metadata for the at least one enterprise data asset that corresponds with metadata for the specific enterprise data asset, and has a more general context.

71. The method of claim 69 wherein the comparison report indicates metadata for the at least one enterprise data asset that corresponds with metadata for the specific enterprise data asset, and has a more specific context.

72. The method of claim 49 further comprising generating program code instructions corresponding to a report.

73. The method of claim 72 wherein the program code instructions are expressed as SQL script.

74. The method of claim 72 wherein the program code instructions are expressed as XSLT script.

75. The method of claim 72 wherein the program code instructions are expressed as Java code.

76. The method of claim 72 wherein the program code instructions are expressed as a transformation planning report, describing steps to transform data from one asset to another.

77. The method of claim 49 further comprising generating a request to apply at least one modification to the graph.

78. The method of claim 77 further comprising enforcing at least one approval process for the request.

79. The method of claim 49 wherein the graph includes nodes for an ontology model, into which asset metadata is mapped.

80. The method of claim 79 wherein the ontology model is a generic industry model.

81. The method of claim 79 wherein the ontology model is an enterprise specific model.

82. The method of claim 79 wherein edges connect pairs of nodes that correspond to metadata that is mapped to one another.

83. The method of claim 79 wherein the report is a statistical summary report describing a percentage of enterprise data assets for which asset metadata is mapped to the ontology model.

84. The method of claim 79 wherein the report is a statistical summary report describing a percentage of enterprise data assets for which asset metadata is completely mapped to the ontology model.

85. The method of claim 79 wherein the report is a statistical summary report describing a percentage of enterprise data assets for which asset metadata is partially mapped to the ontology model.

86. The method of claim 79 wherein the report is a comparison report, comparing metadata for at least one enterprise data asset with metadata for the ontology model.

87. The method of claim 86 wherein the comparison report indicates metadata for the at least one enterprise data asset that corresponds with metadata for the ontology model, and has a more general context.

88. The method of claim 86 wherein the comparison report indicates metadata for the at least one enterprise data asset that corresponds with metadata for the ontology model, and has a more specific context.

89. The method of claim 49 further comprising restricting a user's access to asset metadata based on a user privilege.

90. The method of claim 49 further comprising restricting a user's access to asset metadata based on a requested action.

91. The method of claim 49 further comprising restricting a user's access to asset metadata based on a subject area of asset metadata.

92. The method of claim 49 further comprising displaying different parts of the asset metadata to different types of users.

93. The method of claim 49 further comprising displaying different parts of the asset metadata to technical and non-technical users.

94. The method of claim 49 further comprising displaying asset metadata in different formats to different types of users.

95. A computer-readable storage medium storing program code for causing a computer to perform the steps of:

providing a data structure in the form of a graph, with nodes representing asset metadata for enterprise data assets and edges representing relationships between asset metadata;

generating at least one path within the graph satisfying prescribed constraints; and

generating a report about the graph, based on paths generated by said path finder.